

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of the claims in the application.

Listing of the claims:

1. (Currently amended) Apparatus for measuring the strength of a person's respiratory muscles, which apparatus comprises a mouthpiece for the person, a flow transducer, a pressure transducer, a variable orifice valve, a motor for operating the variable orifice valve, and a microprocessor controller, wherein the microprocessor controller controls the motor to cause the variable orifice valve to vary its orifice size in response to at least one of flow and pressure signals obtained consequent upon the person breathing into the mouthpiece, wherein the orifice size maintains a constant predetermined pressure and enables measurement of the flow rate generated by the person, or the orifice size maintains a constant predetermined flow rate and enables measurement of the pressure generated by the person, and wherein the variable orifice valve is a rotary variable orifice valve comprising a cylindrical member, a longitudinally extending bore in the cylindrical member, a lateral aperture positioned in a wall of the cylindrical member and between ends of the cylindrical member, a sleeve, a longitudinally extending bore in the sleeve, and a lateral aperture positioned in a wall of the sleeve between ends of the sleeve, and wherein at least one of the

lateral aperture positioned in the wall of the cylindrical member and the lateral aperture positioned in the wall of the sleeve is of a triangular shape.

2. (Previously presented) Apparatus according to claim 1 and including a control circuit, the flow transducer being connected to the control circuit, the pressure transducer being connected to the variable orifice valve and to the control circuit, and the control circuit being connected to the microprocessor control means.
3. (Original) Apparatus according to claim 1 in which the microprocessor control means comprises a microprocessor circuit, display means, and a keypad.
4. (Original) Apparatus according to claim 3 in which the display means is a display screen and/or a hard copy print device.
5. (Original) Apparatus according to claim 1 in which the mouthpiece has a flange at the end of the mouthpiece that goes into the person's mouth.
- 6-12. (Cancelled)